

ALASKA INDUSTRY COUNCIL MEETING MINUTES April 8, 2009

The Alaska Industry Council met at the Alaska DOT/PF Building on April 8, 2009, at 8:00 A.M.

The following agenda items were presented:

| | |
|--|--------------------|
| Introductions | Round Table |
| Opening Remarks | Jere Hayslett, FAA |
| Technical Update | Wes Mooty, FAA |
| Navigation Services Update | JoAnn Ford, FAA |
| Information Sharing | All |
| Industry Feedback (Round Table) | All |

Opening Remarks – Jere Hayslett

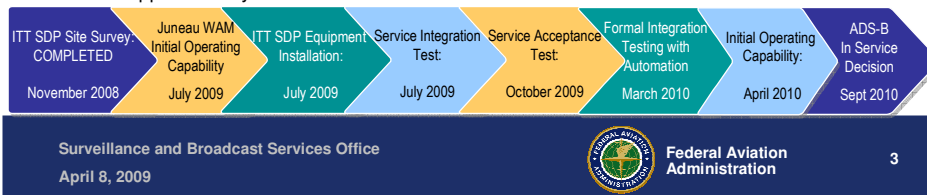
Jere Hayslett opened and chaired the meeting via telephone. Jere commented that the following information pertaining to Critical Services will become the standard format for reporting WSA activities pertaining to Juneau WAM and SV 178 at Industry Council meetings.

Critical Services: Western Service Area

- Juneau En Route Service Volume (#178)
- SDP: Anchorage ARTCC ←
- Automation: MEARTS
- Key Milestones/information:
 - ITT Design review completed: Feb 09
 - Juneau WAM optimization completed: Mar 2009
 - Juneau WAM SAT performance testing completed: Mar 2009
 - Juneau WAM Separation standards data collection & analysis: April 2009
 - Juneau WAM Separation Standards Approval: May 2009



Service Delivery Point is Anchorage Center.
Automation Platform is Micro EARTS



Moving ahead with the integration of ITT's deployment of ADS-B you will begin to see more detailed and mixed Legacy and ITT activities of the first 4 national Key Sites for ADS-B.

Those sites are: Louisville, KY, Philadelphia, Gulf of Mexico and Juneau (SV 178). Wide Area Multi-lateration will be included in the SV 178 Key Site test for ADS-B. This is unique to this site. All of these activities will lead to the final approval for deployment of ADS-B.

Kelley Erickson-Felter has been collecting the flight data below for use in re-writing the Agreement Implementation Plan (AIC). The information is in the preliminary stages and will not be released in its entirety until completed. The SBS office will continue to provide updates as information is gathered.

Alaska Implementation (AIC) Plan

- **Reassessing the implementation plan and developing new strategies for avionics equipage and the related ground deployment.**
- **Aircraft equipped or committed to equip with ADS-B avionics**

| | Commercial equipped | Commercial-committed | GA equipped |
|----------------------------|---------------------|----------------------|-------------|
| Capstone Phase I-active | 197 | | |
| Capstone Phase II - active | 160 | | |
| Self-Equipped | 16 | | 14 |
| Committed | | 50 | |
| Total | 373 | 50 | 14 |

| | |
|---|-----|
| Grand total with Capstone (equipped & committed) | 437 |
| Grand total without Capstone (equipped & committed) | 80 |

| | | |
|----------------------------------|----------------|---------------------------|
| Current number of aircraft in AK | 6,111 (active) | 8,874 (includes inactive) |
|----------------------------------|----------------|---------------------------|

Surveillance and Broadcast Services Office
April 8, 2009

Federal Aviation
Administration

4

The reason for reassessing the implementation plan is that under the current plan equipage numbers are not being met. The original goal for equipage was approximately 1300 aircraft equipped with ADS-B capable avionics by the end of 2009. At this time only 437 aircraft have been equipped (inclusive of those equipped through Capstone Phase I & II). By reassessing the plan and making the necessary adjustments the AIC hopes to give industry more time to equip the number of aircraft needed to gain benefits and trigger ground service deployment in each Service Volume. Jere stressed that while the FAA and AIC work on a new plan, efforts by the FAA to encourage equipage would continue either through FAA outreach efforts or by signing agreements with individual companies.

Technical Update- Wes Mooty

Wes Mooty presented the following information pertaining to ground infrastructure and airport improvements around the State of Alaska.

- **ADS-B Essential Services – Status**
 - All FY09 sites have been engineered
 - Proceeding with Nome install -- May '09
 - FY10 ITT will begin to replace GBT Legacy Sites
 - ITT contract modified to include 14 low En route Alaska Service Volumes

- **GBT Site JAIs**
 - Sunnahae – awaiting weather availability
- **TIS- B Availability**
 - Murphy Dome/Reindeer Hill –ASR11 Integration
 - Performing feasibility assessment based on FAI survey
 - Program Management decision underway
- **Automated Weather Observation Systems (AWOS) Updates**
 - **FY '08 Activities – Commissioning (6 Completed)**
 - Shungnak – Commission ASAP
 - FCC License Completed
 - Link cabling on hold for weather
 - Barter Island – Commission in Spring 09
- **FY '09 Activities - Engineering/Planning Phase**
 - Brevig Mission
 - White Mountain
 - Noorvik
 - Shaktoolik
 - Elim
- **Juneau WAM Status is as follows:**
 - Site Acceptance Testing (SAT)
 - Performance Test completed – No issues unresolved
- **KTOO Facility**
 - Site Prep completed
 - Install scheduled for April 27
- **FY'09 Sites (Williams Mtn, Lynns Int)**
 - Site engineering is now complete
 - Proceeding with installs, planned for late May '09

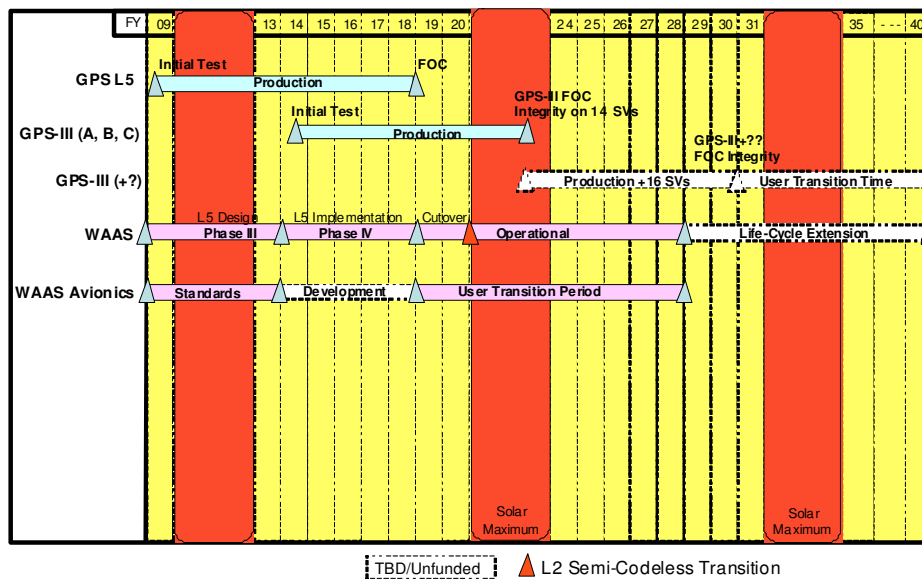
Navigation Services Systems Update – JoAnn Ford

JoAnne Ford presented information on the following agenda items for Navigation Services.

- WAAS Long Term Schedule
- NAS and Alaska Published LPVs
- Status of:
 - WAAS Equipage
 - Cold Bay WAAS Ground Reference Station Relocation

The Chart Below provides a combined view of the relevant GPS-III and WAAS schedules.

Long Term Schedule



The GPS L5 FOC and L2-Semi codeless transition dates are pacing items for the WAAS program. Currently, the GPS L5 FOC date is synchronized very well with the end of WAAS Phase IV when all of the L5 system design changes must be implemented and ready for cutover. Between September 2018 and December 31, 2020, WAAS will complete the L5 cutover, consistent with the L2-Semi Codeless Federal Register Announcement. Any delays to the GPS L5 FOC will result in impacts to the WAAS L5 cutover date. In parallel with the ground system development activity, new standards for dual frequency (L1/L5) avionics will be established by 2013 and new avionics developed by 2018.

The potential for GPS-III to eventually replace WAAS has been an item of interest. According to the threshold requirements, GPS-III adds integrity to the Block C satellites culminating in 14 integrity-capable satellites by the GPS-III FOC date in early FY2023. However, a minimum of 24 satellites are required to provide a near-equivalent capability to WAAS. Therefore, the GPS-III FOC, as currently defined does not result in a full operational capability (FOC) for integrity, equivalent to WAAS. Approximately 10-16 additional satellites (depending on number of spares) would be needed to provide a full constellation of integrity-capable satellites. Based on historical launch rates of 1½ -2 satellites per year, the GPS-III constellation could potentially reach 24 in approximately 8 years or FY2030. Once Full Operational Capability for Integrity is achieved, a minimum of 10 years would be required to transition aviation user's equipment to the new signals, completing by FY2040. During the user transition period, both WAAS and GPS-III services would be provided in parallel, requiring an extension of the WAAS service life by 12 years to FY2040. Alternatives could be assessed in the future, but it is recommended that alternatives not impact the near term priority for constellation sustainment to ensure the SPS PS commitments are met.

NAS WAAS LPV Procedure Publication Progress to Date (as of April 9, 2009 publishing cycle)

| | |
|--|------|
| LPVs Published to non-ILS Runways | 864 |
| LPVs Published to ILS Runways | 648 |
| Cumulative LPVs Published to Date | 1516 |
| LPVs Published to <250' Decision Altitude – 95 | |

1 non-ILS LPV added this cycle

The following is the current list of Alaska LPV Approaches:

- Total 35 - Current LPV approaches (as of April 9, 2009)
 - **Anchorage 3, Homer 2, Emmonak 2, St. Michaels 1, St. Mary's 2, Yakutat 1, Deadhorse 2, Kenai 2, Selawik 1, Cold Bay 1, Gulkana 2, Ruby 1, Galena 2, Huslia 2, King Salmon 2, Ketchikan 1, Prospect Creek 1, Bethel 2, Napakiak 2, Shageluk 1, Kwethluk 2**
- (SOURCE: AVN website: includes LPVs from all sources of FAA and AIP funding, private and public approaches)

Planned Tentative LPV Approaches as of 04/09 are:

- May 7, 2009
 - Fairbanks (2) at flight check
 - Lliamna 2
 - Quinhagak 2
- July 2, 2009
 - Cold Bay 1
- August 27, 2009 (13)
 - Shaktoolik 2
 - Chuathbalak 2
 - Noorvik/Robert/Bob Curtis 2
 - Elim 1
 - Kaltag 1
 - Koyuluk 2
 - Kotzebue 1
 - Yakutat 2
- October 22, 2009
 - Fairbanks 2
 - Barrow/Wiley Post 1

The WAAS equipage list is as follows and is not all inclusive:

- GARMIN + Universal: Approx 41,000+ (TSO-145 or TSO-146)
 - number does not include SAAAR and/or ongoing R&D
- Alaska equipage – Horizon, Northern Air Cargo, ConocoPhillips, Frontier/ERA, Alyeska Pipeline, Bering Air, Alaska Air Transit, Penair
- First United States WAAS-equipped BOEING anticipated operational in April-May 2009.

The following information pertains to Garmin Software upgrades:
GNS-480, Dec 15, 2008, Software Service Bulletin #0850, Rev A:

- Level of Service annunciation now matches the charted decision height Level of Service (When providing vertical assistance for approaches with unknown Level of Service the unit will annunciate the approach as "Lnav+V")
- **Support for LP (Localizer Precision) approaches**
- Enhanced user interface for airway selection
- Support for manual holds at final approach fixes
- GPS/WAAS software version 3.2 allows for removal of the previously imposed limitations listed in Garmin Service Bulletin 0621B.
- GPS/WAAS software upgrade v3.2, installed with a compliant antenna, restores full TSO-C146a compliance for primary navigation.

GNS-400W/500W Series, Dec 15, 2008, Software Service Bulletin #0740, Rev B:
400W / 500W Series Unit's software upgrade to Main Software version 3.00 & GPS Software version 3.0—Removal of IFR GPS operational limitation with TSO-C146A When using a compliant antenna.

For the WAAS Avionics Status list and a list of WAAS Aircraft LPV STCs in work with Universal Avionics, refer to the April Industry Council Power Point.

Miscellaneous

No items addressed

Round Table

No comments